

Upper Arlington 21st Century Skills

Complex Thinking Definition

9/29/2010

CRITERION A: COMPLEX THINKING

Indicator 1: Identifies and defines authentic problems and essential questions.

Descriptors:

- Identifies and defines authentic problems clearly and precisely.
- Formulates essential questions (essential questions are those that NEED DEFINITION).

Indicator 2: Collects, assesses, and analyzes relevant information.

Descriptors:

- Collects multiple and diverse sources of credible evidence.
- Identifies and assesses information relative to the essential question.
- Analyzes information by identifying a relationship and/or pattern among components.
- Organizes information effectively.

Indicator 3: Explores and develops solutions.

Descriptors:

- Uses higher-order thinking and reasoning strategies to explore and develop solutions.
 - Analyzes
 - Interprets
 - Infers
 - Evaluates
 - Synthesizes
- Identifies and articulates alternate explanations.

Indicator 4: Makes judgments and decisions.

Descriptors:

- Identifies criteria to gauge the strengths, limitations, and value of information/data (qualitative/quantitative).
- Selects the appropriate information/data (qualitative/quantitative) to make evidence-based judgments and decisions.

Indicator 5: Uses systems thinking to understand complex inter-relationships.

Descriptors:

- To be determined.

Indicator 6: Reflects critically on learning experiences, processes, and solutions.

Descriptors:

- Reflects with candor and depth on the learning experiences (what I did and what I learned) and processes (how and why I did it).
- Evaluates and refines solution and determines next steps.